



## *Experience is the Best Teacher*

*By Kate Birchenough*

When Sara Place, a Norwich, NY native began her internship with Lewis County Cornell Cooperative Extension (CCE), she had no prior experience with extension and wasn't quite sure what to expect.

Place did an internship jointly arranged by Frans Vokey, Cornell Cooperative Extension of Lewis County, and Quirine Ketterings of the Cornell Nutrient Management Spear Program (NMSP). The internship was one of three internship programs sponsored by the College of Agriculture and Life Sciences (CAL S).

"Partnering with CAL S on this internship program was a chance to offer exciting opportunities for our students", said Helene Dillard, Associate Dean and Director of Cornell Cooperative Extension. "We are pleased to be able to offer this invaluable internship experience to undergraduates in the college. Sara's new knowledge and skills will be tremendous assets to the agriculture industry in New York State."

While most of Place's time was spent in Lewis County, helping with different applied research and extension projects, she also spent time on the Cornell campus. She worked with NMSP staff in the laboratory, joined for extension field days, a nutrient management extension retreat, and the Northeast Regional meetings of the American Society of Agronomy, the Soil Science Society of America and the Crop Science Society of America that was held at Penn State this summer.

"Sara expressed an interest in nutrient management and she seemed the perfect candidate for the internship in Lewis County," said Ketterings.

"I have a background in animal science and dairy production and I hoped the internship would give me a different perspective on things," Place said. "Environmental protection is an issue of growing importance for the dairy industry," said Place. "To keep environmental impacts at a minimum, producers need to be more efficient with their nutrient use."

Place worked closely with Vokey of Lewis County CCE.

"We wanted her to fully experience what extension education is all about. She attended professional development and program planning meetings, conducted research, made farm visits with me, and participated in discussions. Whatever was going on she jumped into," said Vokey.

"We also customized the internship for her interests; we tried to expose her to many aspects of our agriculture program," continued Vokey. "She was also able to spend time with local professionals – a crop consultant and the soil and water district manager – to round out her experience."

One of the local professionals was Terry McClelland, an independent crop consultant. McClelland exposed Place to integrated pest management techniques for weed and insect scouting. From him she learned how to take plant tissue samples to determine nutrient deficiencies in corn and how to scout no-till corn with emergence issues.

"My role was to enrich her experience," said McClelland. "To provide a more diverse experience and to show Sara how a private enterprise operates."



*Sara Place, Animal Science senior and College of Agriculture and Life Sciences nutrient management intern with Lewis County Cornell Cooperative Extension.*

"Because of the dry weather and slow development, we made multiple trips to the field to determine if any army worm thresholds were met so that treatments may be used if necessary to prevent further economic losses," said McClelland.

"It was for me a great way to experience private industry," Place said. "And to see how the interactions between farmers and cooperative extension are both different and similar to the work the private sector does."

"Sara was eager to learn and picked up the concepts quickly," McClelland said of the Cornell University senior. "She was able to utilize her knowledge base from school and her agricultural background in an applied setting."

During her internship, Place worked closely with Joe Lawrence, a Cornell University graduate student and NMSP team member. Lawrence will graduate in December 2007 and start his new job as Lewis County Field Crop Educator in January of 2008. With the Lewis County CCE staff short of field crops person for the year, Place served as an important presence within the county and with producers.

"We had three state-wide NMSP projects that included work in Lewis County this summer", Lawrence explains. Place worked on a mass nutrient balance study for farms, a sulfur survey study, and the nitrogen for corn project with Lawrence. For the mass nutrient balance project, she collected data by going to different farms in the county and talking with producers about their inputs and outputs. For the sulfur project Place went out into the fields, collected alfalfa tissue samples and then followed up with the producers, asking about their management practices and the different varieties they planted. She wrote an agronomy fact sheet on sulfur. And for the nitrogen project, she joined Lawrence and other team members at sidedressing time to take soil samples and apply the nitrogen treatments. She spent a few weeks at Cornell working in the lab, processing soil samples as well.

"She saw how important it is to have a campus-county collaboration for these applied

research and extension projects," Lawrence remarked. "When she was out in the fields talking with farmers, she also served as eyes and ears for the county, staying in tune with the farmers and relaying it back to Frans and myself," said Lawrence.

"It was really great getting out into the field. I saw more of the agronomy side of agriculture. It was interesting to see the environmental impact of the dairy industry." Place remarked.

"Having grown up on a 70 cow dairy, she understands the economics of the information she helped collect, as CCE provides the producers with new research information on how to save money, improve farm profitability, and help the environment along the way," Vokey adds.

Though Place is still unsure as to where the future may take her, she sees the internship as an invaluable experience.

"It was a great experience," she said. "I gained knowledge about nutrient management and the many facets of that. If I go into this field, the internship will definitely help me position myself."

"It is refreshing to see an ambitious college student possibly considering a career in extension and to see her get experience and gain exposure to all aspects of the dairy industry," Vokey added.

"Whether she has an interest in pursuing a career in Extension or not, she is looking at a career in agriculture in New York state," said Vokey. "Being familiar with the CCE system will be very helpful for her and it would be helpful for us to have someone like Sara in the agricultural industry as well."

"This internship program has been a win-win for all of us involved", Ketterings concludes. "We hope to expand the program so more students will have similar opportunities."



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The **Nutrient Management Spear Program (NMSP)** is an applied research, teaching and extension program for field crop fertilizer and manure management on dairy and livestock farms. It is a collaboration among faculty, staff and students in the Department of Crop and Soil Sciences, Cornell Cooperative Extension and PRODAIRY. Our vision is to assess current knowledge, identify research and educational needs, facilitate new research, technology and knowledge transfer, and aid in the on-farm implementation of strategies for field crop nutrient management including timely application of organic and inorganic nutrient sources to improve farm profitability while protecting the environment. An integrated network approach is used to address research, extension and teaching priorities in nutrient management in New York State. For more information on NMSP projects and extension/teaching activities, visit the program website (<http://nmssp.css.cornell.edu>) or contact Quirine Ketterings at [gmk2@cornell.edu](mailto:gmk2@cornell.edu) or (607) 255-3061.